

ARC92001118CS1  
09/23,247

In the Drawings:

None

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ARC920010010001  
05/02/05, 347REMARKS

This amendment is in response to the Examiner's Office Action dated 12/8/2004. Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

STATUS OF CLAIMS

Claims 1-23 are pending.

Claims 1, 3, 13 and 23 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point and claim the subject matter which is the invention.

Claim 22 stands rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-23 stand rejected under 35 USC 103(a) as being unpatentable over Noll et al. (USPA 2002/0054087) in view of Hosken (USP 6438579).

OVERVIEW OF CLAIMED INVENTION

The present invention is a method of dynamically optimizing bandwidth allocation in combination with dynamically optimized user channel placement. Using the preferred embodiment (music or songs) in a simplified example, the present invention may have 3 channels—A, B, and C. Channel A contains songs 1, 2, and 3; channel B contains songs 4, 5, and 6; and channel C contains songs 7, 8, and 9. That is, the bandwidth is equally allocated to channels A, B, and C to retain content (songs 1-9). As is described below, the channels in the present invention may be then dynamically optimized by continuously reallocating different bandwidths to each channel as needed, as opposed to the prior art, where channels and their

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content are predetermined. Additionally, users may be dynamically allocated to access channels based on a match.

Continuing with the example, a user provides his or her song preferences, such as songs 1 and 3. The user will then be allocated access to channel A. The process then continues allocating users to either channel A, B, or C. The user, however, may change their preferences, and thus, in the present invention, the channels may also change. For example, a user may decide that they enjoy song 4 in addition to songs 1 and 3. By adding song 4 as a preference (or voting for song 4), the bandwidth in channel A is dynamically allocated to now contain songs 1, 2, 3, and 4 (leaving channel B with only songs 5 and 6). The system recursively receives multiple user preferences, thus allowing the amount of bandwidth per channel to be allocated as needed. One of the goals of the present invention is to provide a "best match" scenario between the users, the allocated channels, and their access to the channels. The present invention accomplishes this goal by dynamically allocating (or continuously changing) the bandwidth of the channels and dynamically allocating the content with each select channel based on the preferences of multiple users. In addition, the users are dynamically connected to the appropriate channel that best matches their preferences. The prior art does not provide, describe, make obvious, or motivate a method or system of optimizing bandwidth through dynamic allocation.

User access may be dynamically allocated depending on particular preferences. For example, in the morning they may prefer channel A and in the afternoon channel C, or they may choose based on mood. The present invention also provides for this service.

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09/21/07In the ClaimsREJECTIONS UNDER 35 USC 112, second paragraph

Claims 1, 3, 13 and 23 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point and claim the subject matter which is the invention.

Claims 1, 3, 13, and 23 have been amended. Antecedent basis has been corrected.

REJECTIONS UNDER 35 USC 101

Claim 22 stands rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter. Claim 22 has been amended.

REJECTIONS UNDER 35 USC 103(a)

Claims 1-23 stand rejected under 35 USC 103(a) as being unpatentable over Noll et al. (USPA 2002/0054087), hereafter Noll, in view of Hosken (USP 6,438,579), hereafter Hosken. To establish a prima facie case of obviousness under U.S.C. § 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Additionally, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure (In re Vaack, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Applicant contends, as will be seen from the arguments below, that the Examiner has failed to establish a prima facie case of obviousness under 35 U.S.C. § 103 (a).

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The examiner contends that it would have been obvious to one of ordinary skill in the art to combine the customized channel dancer of Noll with the content recommendation system of Hosken in order to obtain the optimization of bandwidth and collaborative content programming goal of the present invention. As noted above, the present invention, as claimed, is concerned with the optimization of bandwidth and dynamic allocation of bandwidth, content, and users to select channels. The use of channels is known. Delivering content to users is known. However, a method and system of dynamically allocating bandwidth into channels is not known. Recursively receiving user preferences from multiple users to optimize bandwidth is also not shown in the prior art. In addition, dynamically retaining content within a channel based on a collation of preferences is also not provided. As will be described in detail, neither Noll nor Hosken provide the basic elements required by the claims of the present invention, nor do they provide the motivation for such.

#### Claim 1

Noll provides a method for customizing an interface based on a user's individual profile. Figure 6 of Noll illustrates a content and advertising classification. In the method (element 1370), the nature of the content is classified and filtered before being provided to the user. This teaches away from a goal of the present invention. In the present invention, channels are dynamic. The bandwidth of the channels may be allocated as well as the content in the channels. The content in Noll is not dynamically allocated or retained.

In Noll, the user receives messages, advertisements, etc. based on individual preferences through virtual channels. As noted by the examiner on page 5 of his rejection, "Noll is silent" on the collation of preferences from multiple users. The "collation" and "allocation" are essential

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Hosken provides a content item referral system that provides a set of recommended items particularly tailored to the personalized interests of a single user. The examiner has pointed to column 2, lines 36-50 to provide for the elements in claim 1. This column, however, only provides for a method of filtering according to an individual user's preferences. The present invention uses a collaboration of both individual and group preferences in a channel. In an embodiment, Hosken describes the use of group profiles as weighting data to recommend media items based on a user's individual profile. That is, in Hosken a user's profile is compared to another user's profile such that suggestions may be made and presented to that individual user.

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One of the goals of the present invention is to allow users with similar preferences to jointly decide what content is included in the channel which they are a part of. In Hosken, there is no group or joint decision making as to the content that is provided. Only the profiles of users are individually compared in order to provide recommendations. Multiple users are not provided access to a channel. Hosken does not provide a "collation of preferences," nor does it provide dynamically retaining content with a channel.

Noll does not provide the required claim elements related to the method of optimizing bandwidth, in particular: "dynamically allocating said bandwidth to a plurality of channels;" "recursively receives user preferences...from multiple users;" "dynamically retaining...a collection of content based on a collation" or "dynamically allocating user access." In addition, Noll ignores the collaborative decisions of the users; in particular: "allocation of users to said distributed content," "receiving users preferences of content information from multiple users," and "retaining within a selected channel a collection of specific instance of content based on a collation of said preferences." Similarly, Hosken does not provide the required elements of the claims. Both Noll and Hosken are missing the required dynamic allocation and collation elements as described and claimed in the present invention. Additionally, each reference provides different methods for content delivery. Noll provides channels for delivering content information. Hosken, on the other hand, provides a static list or table of content information. Therefore, it would not have been obvious, nor is there motivation, to combine Noll and Hosken. The teaching to modify the references must come from the references themselves, and neither Noll or Hosken provides such. Even if the combination was deemed proper, the combination of Noll and Hosken would not produce the claimed invention, as dynamic allocation as provided by the present invention is not provided in either reference.

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Claims 2-8 and 10 are dependent on claim 1. Because Noll and Hosken fail to provide ~~for~~ and every claim element in claim 1, all arguments provided above for claim 1 should be ~~not~~ and applied to dependent claims 2-8 and 10.

#### Claim 9

Claim 9 is also dependent on claim 1. All arguments provided above for claim 1 ~~shall~~ be noted and applied to claim 9.

As stated by the examiner on pages 11-12 of his rejection, Noll fails to teach, in addition to the required elements argued above with respect to claim 1, "dynamically providing access" to a channel "based on a match of a specific user's collaborative preferences with that of the preferences of the allocated channel." The examiner continues by saying that Hosken "teaches a user may rate a piece of content" and ratings are stored for general use. The examiner points to column 6, lines 10-17, 31-33, and 33-43. Here Hosken mentions user and group profiles having information, such as ratings, that expresses an interest level in different types of media. "Work tables" are prepared as recommended sets by comparing individual profiles. The examiner also notes that the "collaborative cluster tables" taught by Hosken are provided as associated preferences for the grouping of content. The examiner specifically states on page 12 that the "grouping of content" is "based on group collaborative data." However, a closer reading of column 15, lines 17-66 and column 16-20 states that, upon finding a match between users, the two user profiles are compared to identify items of one profile not present in the other. The "collaborative recommendations" are made by individually comparing a user with an additional user until there are no remaining related profiles. The present invention utilizes a collation of preferences from multiple users at one time to allocate the content in a channel, and then allocate

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a user to a particular channel that meets their individual preferences. Hosken does not describe dynamically allocating a user access based on a user's preferences. Furthermore, as previously noted, Hosken does not provide channels. Hosken, rather, provides tables or lists. Therefore, there would be no motivation to implement the channels of Noll with Hosken.

**Claim 11**

Claim 11 describes a system of the present invention that may be dynamically modified based on aggregated content requests. Noll does not provide a content engine that aggregates specific content requests. Rather, Noll provides content to a single user based on their individual preferences (see Noll, paragraph 49). On pages 14-15, the examiner states that “Noll is silent on” the required claim element “said content engine dynamically modifying said collected specific instances of content retained in said content database” into channels based on said aggregating. The examiner suggests that Hosken teaches “a system providing a content filter for identifying and providing information for content items.” Also stated by the examiner is that Hosken provides “content recommendations are tailored to a user.” However, Hosken does not provide the claim element of “aggregating said specific content request and requestor evaluations of specific content.” Rather, Hosken compares one user's profile to another user's profile such that suggestions may be made and presented to one individual user. Furthermore, channels are not used in Hosken. As noted by the examiner, figure 2 shows the content engine of Hosken recommending a set (element 72). Channels are not shown or suggested in Hosken. Since the claims of the present invention require that the content engine connects requestors to available channels, Hosken does not provide the required elements. Furthermore, it would not have been obvious to one of ordinary skill to modify the content of either Noll or Hosken to retain information of the user profiles, as each utilize two different methods of content delivery—Noll

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uses channels and Hosken has tables. Neither Noll nor Hosken provide or suggest the teaching to modify the references to include the required elements of the present invention.

Claims 12-21 are dependent on claim 11. Because Noll and Hosken fail to provide for each and every claim element in claim 11, all arguments provided for claim 11, as well as claim 1, ~~should~~ be noted and applied to dependent claims 12-21.

#### Claims 22 and 23

As noted by the examiner on pages 20 and 21, "Noll fails to teach evaluation aggregation of the request from multiple users to come up with content collection." The examiner states that Hosken teaches evaluation aggregation as described under the rejection of claim 1. However, as shown in the argument above, Hosken does not describe the use of channels, there is no group or joint decision making as to the content that is provided, and a "collation of preferences" is not provided. Therefore it would not have been obvious, as suggested by the examiner, to combine Noll and Hosken. Noll and Hosken fail to provide the elements of claims 22 and 23 for the same reasons provided above with respect to claim 1.

#### SUMMARY

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicants' presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

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As this amendment has been timely filed within the set period of response, no petition for extension of time or associated fee is required. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided to Deposit Account No. 12-0010.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicants' representative at the below number.

Respectfully submitted,



Jaclyn A. Schade  
Registration No. 50,569

1725 Duke Street  
Suite 650  
Alexandria, Virginia 22314  
(703) 838-7683  
March 8, 2005

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